

ORAL HYGIENE

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ORAL HYGIENE

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ON BEING AN AMERICAN

AFTER all is said, there are at least five thousand dentists of conscription age in the U. S. A. If one thousand are needed as army dentists, what about the remaining four thousand? Shall they be allowed to hide behind the petticoats of the dental profession and become slackers?

Army dentists are needed, and it is a patriotic duty to supply this need. I tip my hat to the man sacrificing his talents to this end. But to exchange the freedom of private practice for the rough and tumble dentistry of the army, largely made up of cement and amalgam fillings; working under many handicaps, located "somewhere in France," a cantonment or some whistling station; that isn't my idea of being a soldier.

Dentistry is all right enough as a means of securing a livelihood, but personally I would rather dig trenches, rather sift ashes, than be an army dentist. Better, far better, to dwell in the midst of war's alarms and "doing your bit."

Shall these boys in khaki from the farms, factories, stores, schools, banks and mines, from the rivers, plains, mountains and valleys; shall they shame me into doing my part and I a dentist? No, sir! And again, nay, nay, Clara Belle.

As a soldier; a regular khaki-clad soldier; I have the privilege of fighting to defeat the Hohenzollern dynasty, responsible for the sinking of the Lusitania and the carnival of hell that followed for two years before our declaration of war.

Let us not forget the ships burned at sea, the munition plants destroyed, the army of spies, headed by von Bernstorff, Boy-Ed, von Papen and others of like ilk. Let us not forget the insults heaped upon this country. The Zimmerman plot, the arrogance and deception of that light weight liar of the

world, the "war lord," he of the withered hand and his cheerful bunch of pirates, torpedoing hospital ships and dragging in the dust the good name of the Germany of old, and making her an outcast among the family of nations.

For forty years he has debauched the German people. For forty years he has debauched its children; teaching in the schools the splendid and refreshing qualities of war. His every act has been a preparation for "der tag," the day when he expected to rule the world, to subdue by frightfulness, until—like a whipped cur—it would crawl on its belly and eat out of his hand.

As an American soldier I represent one thousand other free-born American citizens. For them, I live and fight to help redress the wrongs of Belgium, the rape and burning of cities, the killing of millions of innocent men and women—and children.

Starving, tear-stained, the dead, the halt, the blind; all cry for me to stand firm and help to make the world a safe place to live. Otherwise, countless generations exist with horror as a bedfellow, and all the fear of a stray dog guarding a bone. Better a return to savagery and man dwell under a dung hill than this.

"Over the top" and give them the jelly wobbles! Fight for a world free and not afraid; free of a German collar marked "Kultur."

And if you do not return. What then?

Man, at best, is but a brief visitor of this earthly sphere. Most of us just exist. We struggle to make sufficient money to support a family and educate our children decently. We strive to make a name and in the end, we die.

Five years later, were it not for the directory office, there would be no record of our having passed this way.

If you are called to defend your country—go gladly and consider it a privilege.

Your America; my America. Born in travail; grown in the rough school of bitter experience. More precious that this America should live than we Americans live.

Attention: Hats off, boys.

Here comes the flag.

THE ROCHESTER DENTAL DISPENSARY

Policies and Rules for Treatment

H. J. BURKHART, D.D.S., Director

Read at a Meeting of the Rochester Dental Society October 9, 1917

MOST of you are aware that the primary object for which Mr. George Eastman founded the Rochester Dental Dispensary was for the purpose of proving out something in preventive dentistry and by the work, experiments and studies that will be carried on here, to formulate theories and methods of operative procedure which will greatly tend to lessen the need for dental service.

To successfully bring about the results which are hoped for by the founder of this institution, it will also be necessary to carry on an educational propaganda to teach parents and children the value of good teeth in the promotion of happiness and good health.

The educational campaign was inaugurated last autumn by the giving of lantern slide lectures and talks in the public schools, and up to this time about 30,807 children have been lectured to in the public, and parochial schools and the charitable institutions of this city. With the completion of the lecture work this week, every school, home and orphan asylum in the city has been visited by the lecturer from the Dispensary and instructions given in the proper hygienic care of the mouth and the importance of observing proper rules to maintain the health of the body. This work has proven to be very satisfactory and many very complimentary references have been made to it by educational authorities and those in charge of the various charitable institutions.

Since January 1st, the teeth of over 11,423 children have been cleaned by operators employed by the Dispensary, and dental hygienists. This work has necessarily been carried on with some difficulty on account of the unusual conditions that have prevailed during the year. Surveys have been made of the mouths of the children in each of the schools where work has been done, and tabulations for the purpose of study and comparison are now being made and will be most interesting when the summary can be presented to you. The work so far carried on in the schools has been done by fifteen duly licensed and paid dental operators and seven licensed and paid dental hygienists, together with the necessary supervising operators in charge of the various clinics.

The work which has been done in the schools and public institutions has met with the very cordial co-operation and support of all of those with whom we have come in contact. This city is to be congratulated that it has a mayor, common council

and school authorities who are alive to the needs of the children and who appreciate what proper dental service will mean to the comfort and health of the children of this city.

While there are some departments of the Dispensary which are not yet ready to be put in operation the infirmary and extracting rooms will be opened at nine o'clock next Monday morning for the reception of patients.

At that time, will be consummated the hopes, the wishes and the desires of the dental profession of this city to have a well organized and modern clinic in operation.

No person who is not under sixteen years of age will receive treatment, and only those children under sixteen whose family's per capita income is \$5 a week or under will be considered. If there are four members of a family—father, mother and two children—and the income or earnings amount to more than \$20 a week, a child cannot receive treatment in the dispensary. If the sum is under \$20 the child will be treated.

A nominal charge of five cents will be made for each visit to the dental clinic. A nominal charge also will be made in the nose, throat, harelip and cleft-palate clinic. Before receiving treatment, each applicant, must fill out an application blank, to be obtained from teachers or those in charge of public institutions, and must be vouched for by some responsible person.

An investigation by the social service secretary of the dispensary will follow, to learn whether the applicant is entitled to treatment under the rules.

While we may, and probably will be imposed upon by those who are able to pay, we shall endeavor, by rigid investigation, to make that number as small as possible. It should be clearly understood that no person who is able to pay for dental or medical services will receive treatment in this institution.

Positively and absolutely, no work will be done for those more than sixteen years old. I wish to emphasize this point strongly because of the numerous requests that have come to me from time to time for emergency and other work for adults. As is well known by all of you, very little in the way of preventive dentistry could be proven out by work on the teeth of an adult, furthermore, the mixing of adults and children in a general clinic would be of very little value to either.

Emergency cases will be treated at any time during infirmary hours, but here the same rule applies—nobody over sixteen years of age can be treated. All cases coming for treatment are required to have a nose, throat and orthodontic examination immediately following the completion of dental work. I wish also here to emphasize the fact that no nose or throat work will be done for any child until its mouth is in a proper hygienic and aseptic condition.

All dental work must be done by appointment, and the patient must be at the clinic at the specified time or the chair

will be assigned to another patient. If notice of sickness is received before the time of appointment, another time will be reserved on the same day and hour the following week. It will be necessary for the applicant to see the Social Service Secretary when any card for treatment is presented.

Clinic hours are as follows: Dental Clinic daily, mornings 9-12; afternoons 1-4:30; Saturdays 9-12:30. Orthodontic Clinic daily: 9-12:30. Extracting Clinic daily: 11-1; 3-4:30; Saturdays 9-12. X-Ray: 11-1.

The days and hours for the nose and throat clinic have not yet been decided upon, as it is not intended to open the hospital until later in the year.

There will be fifteen operators employed in the Dispensary at the beginning, with a superintendent or supervisor of the infirmary, the extracting and orthodontic clinics. It is with pleasure that I tell you that we are fortunate in securing a very efficient staff for the institution. All of those who have been engaged appear to be alive to the scheme of the work as outlined, and interested in the various activities of the institution.

I should like very much to have the Rochester Dental Society consider the matter of deciding upon some day each week or not so frequent, as may be deemed wise, when the members of the society may come to the Dispensary as visiting staffs do who serve in hospitals and institutions like this. Ample facilities will be provided for them to carry on investigations, studies and clinics. It is the desire of the founder and the officers of the Dispensary that there should be a close co-operation between the members of the profession in Rochester and this institution, and I hope that we may receive that cordial support and co-operation which we have been promised and which we expect.

I have been asked to say a word with reference to the school for dental hygienists. We have now enrolled in the school 38 pupils, and it is possible that a few more may come in during the week. A full lecture course has been prepared and put into operation and the work is proceeding in a very satisfactory manner. We have young women from all parts of the country and I am pleased to say that a large percentage of them are full high school graduates.

The work of the graduates of last year proved to be very satisfactory in the clinics and in the public schools, and the reports which I have received from dental practitioners who are employing graduates of this school are very gratifying because they show that dental hygienists have a place in the dental office and are rendering service which is not only satisfactory to the dentists but to the patients as well. I believe the time is not far distant when a well trained dental hygienist will be found in every dental office.

I desire, in conclusion, to say a word with reference to

the legislation which was enacted into a law in Washington, by the President's signature last Saturday.

For something like over twenty years, a determined effort has been made by the officers and members of the National Dental Association to obtain for dentists a proper recognition of the need and value of their service, and to secure for them a corresponding rank with those in other branches of the service. After many years of effort, a law has been passed which secures equal rank for dentists with that of medical men, and in the recent obtaining of this legislation, I am pleased to say that we had the cordial support of many eminent practitioners of medicines, who have been most complimentary with reference to the value of the work which has been done by dentists in recent years. A considerable factor in the obtaining of this legislation was the knowledge on the part of the medical profession and the authorities in Washington, of the splendid services which have been rendered since the beginning of the war, by Drs. Hayes and Davenport and their co-laborers, who have had charge of the dental work in the American Ambulance hospital in Paris. These men have done a wonderful work and accomplished results which have brought much credit to American dentistry.

There was also a law passed exempting dental students from the draft. This is in line with the legislation passed for the medical students and demonstrates that the authorities in Washington and the law makers are keenly alive to the situation and are taking advantage of the mistakes which were made by the European countries at war, by taking into the army all young men of military age without reference to business in which they might be engaged. The result has been that every community abroad suffers from the lack of proper medical and dental attention, on account of the dearth of those who are able to render this service. I wish particularly to impress upon the younger members of this society the value of the work which has been done for them in obtaining this legislation. The way is now open for those who prefer military life to take positions in the service which will afford them a fair remuneration and a status the equal of that of any others in the service of the Government. The organization of this Dispensary and like institutions, the developments along the various lines of dental activity, and this new opportunity for self-respecting service in the army, opens up a wonderful future to the young man who is ambitious to do something for himself and humanity. The opportunities for service are many and varied and the conditions under which that service may be rendered have been made so easy and pleasant, that as a reward to those who have been active in securing this chance for the young men, they should endeavor to repay a portion of it at least by enthusiastic and unselfish service during the present crisis, in the life of the nation.

A DON'T-TELL PARTY

JOHN PHILIP ERWIN, D.D.S., Perkasi, Pa.

Prime purpose, to induce the child to place its mouth in the care of a dentist that the mouth may receive proper attention while the permanent teeth are developing and erupting.

Teach, how the permanent teeth slip quietly into the mouth, and the importance of properly caring for the mouth during that decisive period.

Materials, charts to illustrate the condition of the jaws at about six years of age showing how the permanent teeth force the deciduous teeth out of the jaws; also pictures of a boy and a girl smiling and displaying pretty sets of teeth.

Length of lesson, 15 minutes.

—Author's Note.

JOHN was soon to be eight years old. While studying his lessons one evening, his little mind suddenly began to think about his coming birthday.

"What fun it would be to have a party like Bob and Mary had, a birthday party all for myself," he thought.

Turning to his mamma, he said, "Mamma I will soon be eight years old. I would like to have a don't tell party like you gave Bob and Mary; a real, true, don't-tell party."

His mamma laid down her book in surprise, and asked, "What do you mean by a don't-tell party?"

"Why, one of those parties when you take me into the parlor and I find the room full of laughing boys and girls and we play games and sing and have a jolly time; then you take us into the dining room and give us ice cream and cake and you don't tell me anything about it beforehand," replied John.

"Oh, I understand now. You mean a surprise party," said his mamma.

"Yes, that is it. But don't tell me when they are coming. I want a real party."

After they had talked about the good time they were to have, his mamma told him, "When little boys want a don't tell party, they must be ready at all times to greet their friends. You do not know when such a party may come for you. But you do know that your playmates will be dressed in their prettiest clothes. If they should happen to find you with face and hands dirty and your toys broken and thrown about, they would laugh at you. You must keep you parlor in good order."

This made John think. "I don't want my playmates to make fun of me. I will keep my toys out of the parlor and be ready when they come," he promised."

But John soon forgot. Sometimes when he finished playing he left his ball and blocks about the room. Often he was dirty and mussed.

Then his mamma would say, "be careful, John, your parlor is not ready for a don't-tell party."

But he did not mind. He only thought of having a good time with his toys. The don't-tell party seemed far away.

One day, this forgetful little boy was very busy playing. His face and hands were dirty. All about him were his toys and playthings. Imagine his surprise when there rushed in upon him a real don't-tell party of clean boys and girls. John was the only dirty one there. And worst of all, his parlor was not ready to receive them.

What could he do? At first he looked at them without saying a word. Then he remembered that it was his birthday. Why had he forgotten it? Why had he not kept his parlor in good order?

Then what do you think happened? Why, he sat down in a corner and cried. This made all the boys and girls laugh and taught John a lesson which he never forgot. After this he would obey his mamma, and keep his parlor ready for company.

Children, what do you think this story means to teach? Would you like to know who this little boy might be? And where the pretty parlor is? And who the guests are? And when the party is to come?

This story is to teach you a lesson which will help you to have and to enjoy good teeth. There is much that you need to learn and practice if you will save your teeth from the many bad influences waiting to destroy them.

Every boy and girl has two sets of teeth. The first set grows when you are a baby and chews your baby food. They are called baby teeth.

These baby teeth do not last forever. As you grow older and become big men and women you must eat strong food; food too solid for baby teeth to chew. Then, your baby teeth slip quietly out of your mouth to make room for the second set of teeth which we call men-teeth.

Our story is to teach how these men-teeth slip into the mouth.

Where is this pretty parlor we spoke about? Your little mouth is the pretty pink parlor into which comes this wonderful don't-tell party.

Who are the guests? The pearly men-teeth which slip quietly into your little pink parlor, your mouth.

And can you guess the little boy who is to have this don't-tell party? Why, you and you, and every child before me. Each and every child is having a surprise party come into their mouths. Day by day, there are slipping into your little pink parlors new pearly teeth, all dressed up in their prettiest clothes. They do not come with dirty faces. These men-teeth come all shiny and bright to make you happy and proud. They want to please you.

Why do we call it a don't-tell party? Because these men-teeth slip into your mouth just like the boys and girls in the surprise party; they don't tell you when they are coming.

Your second set of teeth grow into your mouth without you knowing it.

What would you think of a little boy if you went to his party and found his parlor all dirty and upset? You would tell your mamma, "That little boy is not nice. His parlor was not clean and pretty. I do not want to go to his parties."

When these pearly men-teeth slip into your pink parlor, they want to find it clean and pretty. If it be dirty, if food is left around and between the teeth, if you never clean your pink parlor, the men-teeth will not stay long with you. They will soon grow cross and go away.

For that reason you should at all times keep your mouth clean and in good order. Clean your pink parlor every night before you go to bed. Brush every piece of food from the teeth. Wash the mouth with clean water.

When you go to a surprise party and find your playmate dressed sweet and clean, ready to receive you, and the parlor in good order, what do you tell your mamma? Of course, you say, "Oh, mamma, we had a jolly time at the surprise party. Everything was so nice. I want to go again."

That is just the way with the new teeth coming into your mouth. If they find your mouth clean and in good order, they will be pleased to remain and make you very happy for many years.

How can you best keep your mouth clean and in good order? By visiting your family dentist as your parents direct. He will know just what your mouth needs and will be pleased to teach you how to properly care for it. With your mouth in the care of a dentist you will always be ready for the don't-tell party.

REMARKS.

There are few dental facts less understood than the development and the eruption of permanent teeth. Adults, as well as children, know little or nothing about how the baby teeth leave, and how the permanent teeth enter the mouth. They trust that luck will carry them safely through their ignorance.

While the child is in the secondary grade, it erupts about sixteen valuable permanent teeth; four centrals, four laterals and eight bicuspids; half of the permanent set. At no other time in the child's life does the mouth need more the skillful guidance of a dentist. The departing, decaying, deciduous teeth can wreck eternally the permanent teeth.

The fate of the permanent teeth is decided during early school life. An ounce of dental prevention in childhood is worth many pounds of cure in manhood. Therefore, impress upon the child, and the parents, the necessity for keeping the mouth of a growing child in the care of a dentist.

The results from this lesson are usually extremely gratifying. It opens up a new world of dental thought which prompts both the child and the parents to seek the advice and the services of a dentist. It also inspires the asking of questions.

The pinnacle of teaching is reached when you succeed in making others think.

ASSOCIATE LESIONS OF FIRST AND SECOND DENTITIONS

Diseases Incident to Teething Period of Babies and Children Improperly
Diagnosed by Medical Profession as Anterior Poliomyelitis.

G. W. COCHRAN, D.D.S., Erie, Penna.

APPARENTLY, the pathology and etiology of anterior poliomyelitis is just as much of a mystery to the medical profession now as it was seventy-five years ago when Heine first coined the name Infantile Paralysis.

The medical profession should not lose sight of the fact that it was an Hungarian physician, Dr. Semmelweiss, who discovered that puerperal fever was a germ disease, and that he lived and died before the scientific world accepted his discovery as being absolutely correct. He was conducting an investigation of the alarming mortality in a lying-in-hospital being at a loss to account for so many of his subjects being passed over to the mortuary list. By careful examination he discovered that the interns were communicating the germs of child-bed fever from one subject to another. Dr. Semmelweiss announced his discovery to the scientific world, only to be scoffed at by the medical profession.

Now, the writer feels that, some day in the near future, the medical profession and the scientific investigators will awaken to a full realization that anterior poliomyelitis is oftener due to associate lesions of the teeth than to any other cause. By associate lesions I mean abnormal tooth eruption, atrophying and putrescent tooth pulps. I do not pretend to blame pathological tooth conditions under three months of age. I desire to state clinical facts as they have presented themselves from time to time. For elaborate pathology of the subject I refer the reader to the books on the subject. The most accurate pathology that has been produced pertaining to this paralysis malady, you will find in Garretson's "System of Oral Surgery," and in the "American System of Dentistry."

It is with pardonable pride that I refer the reader to the writings of J. E. Garretson, M.D., D.D.S., and of James W. White, M.D., D.D.S. It was Garretson's custom in lecturing to his students to say, "In lack of understanding, go to the books." For an exhaustive resume of the pathology of this paralysis subject, therefore, I refer you to the books mentioned. However, this may not be exactly fair, for the reason that a great many who may have occasion to read this article may not have the books in their possession; consequently, for the convenience of the reader, I will quote a portion of the pathological writings of both Garretson and White. For the pathology I accord all credit to these distinguished

educators. I will add simply some facts from my thirty-five years of clinical experience to what I have found to be absolutely correct pathology of the subject.

"In the first place, it is to be remarked that the process of dentition, while a physiological one, is yet, like that of utero-gestation, one of continuous irritation. Of the meaning of this word, irritation, every surgeon and physician has in mind quite enough reminiscences." Irritation, then, of dental origin, reflex in character, traumatic in results, is the matter of consideration in all associate dental lesions, which include difficult tooth eruption, atrophying and putrescent tooth pulps. "The first and second dentition periods are frequently a physiological and anatomical crisis to many babies and children—a process which, under conditions in every respect favorable, may proceed with little or no disturbance to the child, without attracting the attention of even a watchful mother, though it is rare for a child to pass through the period of dentition without more or less manifestation of suffering and frequently most profound disturbance to its health."

Some babies and children erupt their teeth without manifesting any more concern than eating a dish of ice cream, while there are others that experience most profound systemic disturbance, a disturbance that is not always localized or confined to the mouth, due to the un-erupted teeth becoming a constitutional offense; precisely as intra-uterine life, fecal matter and renal secretions become constitutional offences when too long retained. All the above mentioned are purely physiological processes when harmoniously performed and are void of any constitutional offense to the organism; this fact should be so apparent to every practitioner of the healing art as to not require any argument in its favor.

To understand dental reflex irritation necessitates a comprehensive knowledge of not only tooth evolution but an equally comprehensive knowledge of atrophying and putrescent tooth pulps. Clinical experience has thoroughly convinced me that when the cause is not due to difficult tooth eruption, you will invariably find the paralysis associated with atrophying and putrescent tooth pulps. Removing the cause previous to too much damage being done to the central nervous system affords speedy recovery of the subject. This I know to be correct from clinical experience. "An intelligent understanding of the subject under consideration required an appreciation of the physiological relations of the mouth and of the peculiar sensitiveness of infancy. Anatomically considered, no other portion of the human organism offers such a complex association of tissues as those which compose the mouth; no other has such diversified physiological functions; and from a pathological aspect, no such significant systematic relations. Its various offices necessitate a no less varied organization and an equally varied relation with other struc-

tures. The wide circle of its anatomical and physiological sympathies suggest an equal circle of pathological complications; and indicates the diversity as well as the gravity of the disturbances dependent upon systemic relations to which its lesions may give rise."

"In reflex disturbance of dental origin is found an explanation of the mutual relation of apparently unconnected disturbances. The influence of a pathological condition, acting as an irritant upon an afferent nerve, is conveyed to a related central nerve-center which may, from some cause, be in a state of exalted sensibility and is thence reflected along an efferent nerve, producing reflex phenomena." Reflex disturbance of dental origin, due to abnormal tooth eruption, atrophying and putrescent tooth pulps, are variable in character, and their mechanism is not always explainable. Owing to the predominance of the spinal system in infancy, this sympathy of distant organs with one another is notably greater than in adult life, creating a special tendency to reflex phenomena.

Every physician and dentist, doubtless, is aware of the fact that the most virulent kind of streptococcus, or germ life is found in decomposing or putrescent tooth pulps. When a child is not laboring under abnormal tooth eruption you will, upon accurate diagnosis, invariably find atrophying and putrescent tooth pulps to be the exciting factor that is causing the paralysis, or atrophying or wasting limb, or limbs of the child.

Investigators insist that infantile paralysis is of germ origin, and in this respect they are absolutely correct; but the germ life they are making such a strenuous effort to locate they will invariably find within the subject's own organism. In the absence of abnormal tooth eruption I have failed to find atrophying or putrescent tooth pulps, and removing the pathological tooth conditions has always resulted in a recovery to normal conditions. What better evidence than this does science require that the malady is of dental origin?

I do not consider anterior poliomyelitis an infectious and contagious disease; notwithstanding, it looms up occasionally in an epidemic or endemic form. Hot weather is always a most profound excitant of the malady.

Many will argue that thousands of children exhibit most revolting mouth and tooth conditions and yet do not become afflicted with the malady. I grant this to be absolutely correct but on the other hand, every infantile paralysis case that I have treated from a dental aspect has made remarkable recovery to normal, with but the single exception of those cases that had been afflicted too long before the recognized dental lesions were removed. The reflex disturbance that occurs from dental irritation—when too long maintained—produces traumatic results to the central nervous system which leave a

residual paralysis or permanent injury, resulting often in atrophied or wasting limbs. I regret that I am not privileged to get right within the "Arena" of the present endemic form of this malady, because I am positive that when the affliction is discovered in its incipency, the eradicating of pathological tooth conditions will not only restore to normal, but will also abort a residual or permanent injury.

Some years ago, Henry S. Upson, M.M., of Cleveland, O., in connection with some Cleveland dentists and by the use of the X-ray, discovered that painless dental afflictions—un-erupted teeth, dying and putrescent tooth pulps—caused dementia preaco, mental aberration or insanity, and that removing the pathological dental conditions cured many of their abnormal conditions. An extended report on this investigation appeared in the Dental Cosmos, 1910, page 526.

For several years I have been eradicating reflexes of dental origin which would scarcely be believed as such except for the improvement that is observed in systemic conditions—notably, arthritis and rheumatism. I have a large collection of pulp stones taken from teeth, the removal of which relieved long-standing cases of arthritis and Tic-dou-lou-reux. Adults that become afflicted with anterior poliomyetitis invariably disclose un-erupted teeth, atrophying or putrescent tooth pulps.

The way to prevent infantile paralysis causing death or leaving a permanent injury is to make doubly sure that no pathological dental conditions exist and this is something the average medical practitioner is scarcely competent to cope with without the assistance of one who is thoroughly familiar with dental reflexes.

For the past seventy-five years, scientific investigators have been making a desperate effort to locate the real cause of infantile paralysis; they are no nearer the solution of the problem and never will arrive at the correct solution until they take up the dental aspect of the matter—as the writer has been doing clinically for a number of years.

PSYCHOLOGY AND THE DENTIST

WM. OLEON, D.D.S., Pittsburgh, Pa.

THERE was a certain time, when the science of psychology was a mere speculation for the idle philosopher, a palatable dish for the mind, a mere abstraction and to think of it as a science, in terms of its practicability, as well as its adaptability to our every-day affairs was an insolence, a utopia not to be thought of.

But, if a science is to become more than an abstraction, if it is to live and to grow, then it has to lend itself to practical uses—it must become a part of our very lives, in other words, it must cease to be an abstraction and deal with concrete facts.

Such was the gradual evolution of every science, and so it was with the science of psychology, which from mere abstract ideas became one that explains and controls our acts; our doings, in fact our very lives.

It seems that the study of psychology, or as the branch to which I shall refer as applied psychology, has reached, thanks to researches of Munsterberg, Freud, Sidis and others, an high level, but sad to state has been to a great extent neglected by the dental profession.

While it is true that in a measure it is impossible to write out a set of rules with a precision as to application of psychology to our every-day practice, yet by diligent application, one will solve many

a trying problem: nervous patients, children, and other difficult cases.

But I fear that the profession is to a great extent materialistic, and by that are missing the finer points in life. Everything is concentrated in immediate returns. If psychology were dispensed in packages with the manufacturers label attached to it, then the dentist would be tempted to invest a dollar or more, but to annoy oneself with something which is problematic, well hardly.

And yet, for a better understanding of our fears, emotions, our likes and dislikes, one must turn to psychology for explanation.

The one element in our practice, which is somewhat of a problem to manage is naturally the child, say from four up to twelve. The real difficulty lies in our inability to understand his or her peculiarities, for we lack the knowledge in grasping the controlling elements in the child's make up. Once we establish the "level of approach, we will unquestionably manage the "unmanageable," the fear and the dread of the child will be conquered.

How to achieve it?

"Pain" is a term used to indicate a psychological state arising from the contemplation of a catastrophe or a moral turpitude, to this may

be added a state of fear for the unknown.

The profession has inherited some of the prejudices common to the medical profession, a sort of mystery covering the various doings such as: "pulling teeth," "taking out nerves." Why, the mere thought of it is enough to set one's hair on edge and here to subject oneself to these operations, no wonder the patients dread the dental chair.

So it is mere words that have established the dentist's painful reputation.

Thus we see that the chief obstacles to overcome are false impressions received, whether from hearsay or as a sort of bugaboo indulged by parents to frighten "bad boys." So then, the dentist as well as his office appears in the mind of the child and sometimes in the minds of the grown-ups, as the inquisitor, and the inquisition camera, and the instruments used as "instruments of torture" and surely not to alleviate pain.

The child presented, or better, brought in and often-times pulled into the dental office, is a frightened little animal. To this is added the infernal toothache. What is there for the dentist to do to gain the child's confidence, alleviate pain and make the child smile?

The first impressions striking the child's eye are the white coat of the dentist, the cabinet, the brilliant polish of the instruments and other little things, which help to frighten the child.

Inevitably the question fol-

lows: "Is the tooth hurting you?" An angry look meets the question. Why, man it does, then why ask the question. The very opposite effect should be produced if the confidence is to be gained.

Would it not be better to say: "I will stop, or try to stop the pain in a jiffy, little man, or whatever else you may call? The result is striking; instead of an angry look, you will inevitably produce a smile.

A "level of approach" is being established; now instead of abusing it, cultivate it, as for example, do not handle your instruments as though to frighten the patient; rather explain your step thus taking him further into your confidence, seeking his assistance, impressing upon the patient that only with his co-operation will you relieve him of his pain.

This method may seem the longest yet it is the speediest in producing results.

Another phase well worth considering is to group children's appointments for one day in the week. A child meeting another child, this in itself acts as a tonic, thus placing the child in a more or less appropriate mood for work.

I have just endeavored to touch the high points, but there are hundreds of examples to prove my contention that with a little application of the simple principles of psychology the ordinary every day practice may become more than a mere drudgery.

MAKING THE DOCTOR TAKE HIS OWN MEDICINE

The following from the *Journal of The A. M. A.*, is a description of camp life at Fort Riley where a thousand physicians are in training. At Fort Oglethorpe they have twelve hundred "doctors short and tall, thin and stout, old and young," learning to become army officers. One Philadelphia physician lost twenty-five pounds in weight and reduced his waist measure nine inches. He was so improved in general appearance, that when he went home on a leave of absence, his children hung on his wife's skirts and wanted to know who that strange man was!

THERE are today 1,020 physicians from private life undergoing training in this camp. It is a big melting pot, into which professional men from all parts of the country, of every degree of standing, are thrust for three months—more or less—intensive instruction and drill to be transformed into officers for the Army. It is a big task. To take Dr. Brown of Paducah Center, Neb., away from his country practice and from the comforts and coddling of his family and subject him to the discipline and discomfort of a soldier—to teach a man who has been accustomed to submit to no superior control to sink his individuality and become an efficient unit in Uncle Sam's great war machine—this is the task the Medical Department of the United States Army is performing here.

The first lesson, and perhaps the hardest, for the doctors to learn is that they are no longer doctors but army officers. They have not only to learn how to act as such, but the military spirit must become a habitual attitude of mind. They must learn how to obey commands instinctively and unquestioningly so they may be able to command

such instructive and unquestioning obedience from the men who are to be placed under their control. The majority of these medical reserve officers are to command units of the medical department of the new conscript army, and on them will devolve the responsibility for the efficiency of these units in the field of operations. They must learn how to provide rations, clothing and shelter for their men, how to obtain and account for their medical supplies; they must learn all the details of field army operations so that their units may co-ordinate perfectly with the line organization in combat. Knowledge of medical and surgical technique is of subsidiary importance. The Army takes it for granted that all of us already are sufficiently well equipped as professional men. It is of the highest importance, however, that an officer should know how many rations each of his men is entitled to and where they come from, where he is to obtain his medical supplies, and how he is to dispose of his sick and wounded.

As soon as this fact percolates into the reserve doctor's mind, he understands the significance of the training given him here, and enters into the

work with a loyalty and good will that produce rapid results. It is a strenuous life. The first note of the bugle sounds at 5:15 a. m., and from then till taps at 10 p. m., the student officer has hardly a moment of leisure. There are two hours of drill. No matter how hot the day, back and forth the one-time doctors tramp. It is "fours right" and "about face"—over and over again—and the drill instructors explain again and again the movements and then scold and storm because awkward feet do not promptly obey the command. Then there are classes in which the instructors try to cram into the heads of their pupils the dry and intricate details of army organization and field tactics. One of the biggest tasks is to learn the exact minutiae required in Army correspondence. To the average physician, who notoriously is careless in the keeping of accounts and records, this is doubly difficult. But it must be learned. To the dotting of an "i" and the crossing of a "t" the Adjutant-General's Office requires the most painstaking attention to detail in the making out of reports, requisitions, etc. Any inattention to detail is sure to bring the letter or report back for correction. And Uncle Sam keeps a watchful eye on all of his property. Every tent peg, every penny must be accounted for.

What perhaps impresses the student medical officer most strikingly here is the physical training. Most of

them come here with flabby muscles and protuberant abdomens, stooped shoulders and weak calves. They have ridden in automobiles, eaten heartily, smoked heavily and perhaps were accustomed to a good deal of alcoholic stimulation and have never taken any exercise to amount to anything. Here the first thing every morning is physical exercise when a lot of muscles whose use had almost been forgotten through neglect are again brought into play; and the last thing in the afternoon is an hour and a half of "hiking" over the hills, facetiously called "equitation." So far, few of the officers have got anywhere near a horse. It is "shank's mare" they ride, and a poor steed she proves to be at first. We doctors are not only made to walk, but also to run until our tongues hang out and the sweat streams down our backs and soaks through our puttees. Many of the heavy weights straggle by the wayside, winded, and all except the young men come in thoroughly tired. But a cold shower has surprising restorative powers, and after a hearty supper and a night's sound sleep, few there are who do not awaken fresh and vigorous for another day's grind. Men who have been here since June are brown and hard, trained to a physical efficiency that will be able to undergo any test the battlefields of France may offer.

It is not like home here. It is no picnic. It is a foretaste of war; and we can expect that

Sherman's dictum will prove true. An Army reserve officer who expects to have a private room with bath and linen and silver dining table service had better disabuse himself of the idea at once. Here they live in barracks built a good deal like sheep sheds, 130 men to each barrack, and crowded so closely that only about 12 inches is allowed between cots. In the mess halls there is hardly elbow room and, of

course, the furniture is of the crudest sort. But the food is good and plentiful, and the hard exercise and outdoor life give keen appetites and excellent digestions. Under such conditions, dyspepsia is almost unknown. Should these student officers never see a battlefield, this physical training will be of inestimable value to them. They will have learned how to keep strong and healthy.

THE CONSERVATION OF THE WORLD'S TEETH—A NEW OCCUPATION FOR CRIPPLED SOLDIERS

FRANK B. GILBRETH, Mem. Amer. Soc. M. E.—Member Franklin Institute, Past Vice-President of the Society for the Promotion of Engineering Education, and
LILLIAN MOLLER GILBRETH, Ph. D., Providence, R. I.

This article is from the *Trained Nurse and Hospital Review*. Motion study is the new factor in the Industrial World. Dentists have much to learn in this direction. We venture the prophecy that the subject will be much discussed in the near future.

THIS paper embodies a new aspect of the crippled-soldier problem, that of finding work that needs to be done and has not been done, or has been done inadequately, and assigning it to cripples.

In this age of destruction, there is great need of conservation, and no conservation is so necessary as that of human beings. With the constant destruction of men in the great war has come the pressing need of conserving and using the cripples, both war cripples and industrial cripples. This is necessary for the good of the maimed themselves, as well as for the good of the world.

We may place the cripple by so changing his old work, by means of Motion Study, as to enable him to return to it. In many cases this the best method to use, as it helps the man to "fit back" into normal life, and demands little re-education. Or we may place the cripple by so changing a type of work that he has never done as to make it easy and possible for him to earn a living. An example of this is the work made possible by so adopting the typewriter and other office devices as to allow a man of intelligence who has never operated them to earn a living and compete successfully with uninjured workers. This is an excellent

method where the cripple desires a new occupation and a new interest, or where the old occupation, because of its lack of adaptability, or because of the nature of the maiming, has become unsuitable or impossible.

Or, again, we may place a cripple at some new work, such as Dental Nursing, that has never been done to the degree needed—that is practically a new and a much-needed occupation, and thus not only employ him, but also conserve the energy of those he tends as well.

Dental Nursing may be defined as that part of prophylactic treatment of the teeth that can be done by a person without complete dental training, namely, the polishing of the teeth by hand with a stick and pumice.

There is a world-wide lack of knowledge as to the relation of sound teeth to good health. America is recognized as the leader in the profession of dentistry. American dentists are recognized throughout the world as being, as a class, the most expert practitioners in all branches of dentistry, the other countries are now also coming to the front in this great human work. In spite of the great work of the dentist, even in America, and still more abroad, the care of the teeth is generally looked upon too often by the public as simply concerning appearance, beauty and comfort or speed in the process of mastication rather than as the most important factor of good health, while the dentist is too

often interested primarily in filling cavities rather than preserving the tooth as a whole. The greater productive efficiency resulting from the natural use of all of one's teeth remains almost unappreciated. It is natural, this being the general viewpoint, that care of the teeth, or dental treatment, is often classed as a luxury rather than a necessity. The high cost of dentistry practically makes such treatment a luxury at present.

We find, then, that the average person:

1. Does not appreciate the importance of the by-products resulting from sound, clean teeth.

2. Does not realize that it is physically possible for nearly all to have sound clean teeth.

3. Does not know that the only reason that he has not good natural teeth is because of the present financial problems of high cost of "upkeep."

To be sure, there are dental clinics in all dental schools where one can get dental work done by dental students at a nominal fee, sometimes for merely the cost of the materials and in some cases for no charge whatever. But this is often extremely unsatisfactory, especially if the patients are workers who must lose their working time to attend clinics and secure treatment.

The work of the dentist is expensive and must necessarily be. The high cost of dentistry is not surprising, nor is the profession of dentistry to be blamed for it. The training for the profession is long,

arduous and expensive—and much of the work involves costly materials, as well as time, and provides problems requiring no end of education, experience and the highest grade of skill. Dentistry provides an unlimited, satisfying field for the mechanical genius. How are we to provide proper pay for such work, yet insure necessary treatment to the average wage-earner?

The answer to this is:

1. By functionalizing the work of the dentist.

2. By having the trained expert do the skilled work only.

3. By training low-priced workers to do such parts of the work as requires less skill.

The results of the functionalization will be:

1. Reduction of the cost of the cleaning of the teeth.

2. Clean, which means sound, or "near sound" teeth, within the reach of all.

3. Less need of costly work by the man unable to afford it.

4. Savings that can be devoted to such work, if it be needed.

5. Better health and added efficiency.

6. New work for the dental nurse, the cleaners of the teeth.

There are several questions involved that must be answered. The first is: Do clean teeth last longer than those not clean? It has been proved time and time again that teeth can be preserved by preventive treatment. This is recognized today by all the

best dentists. Nearly all teeth are lost in two ways:

- A. The teeth decay.

- B. The teeth become loose

Both decay and loosening can be almost entirely eliminated by frequent cleaning with a tooth-brush, with dental floss, and treatment by a thorough process such as by the stick and pumice of the operator. It is difficult to get most children and many adult to use a tooth brush habitually, but it is always easier to induce one with good teeth to use a brush regularly than one with poor teeth. Besides the daily cleaning it is desirable also to have frequent cleaning by a dentist, but the dentist cannot afford to give his time to do this cleaning at a price the worker can afford to pay. The result is that the great majority of people have their teeth cleaned by a dentist at periods rather more than less than a year apart.

Careful records of teeth that have been cleaned by a dentist once a month regularly for a long period of years, show beyond the slightest doubt that the number of cavities that occur are very few, and that these can be filled, while of small size, with little injury to the teeth and with little or no pain or discomfort to the patient. The bacteria that cause decay adhere to the surface of the tooth, then cover themselves with a film that is jelly-like at first, and, if not soon removed, becomes a hard covering under which the bacteria proceed safely to attack the tooth. "Decay" follows.

Scrape the bacteria off before they attack the tooth and there is no decay.

The second question is: "Can the work of the dentist be functionalized as suggested?" All work can be functionalized, and most kinds of work are being. The work of the dentist is already functionalized much more than it was a few years ago, and is being divided more and more every year. For example, the dentist makes few of his tools nowadays, and dental laboratories are doing more and more of the mechanical work of the dentist. The laboratory specialists can do the work better than the "all-around" dentist, and can do it for him at a price at which he cannot afford to compete. In other words, the dentist, under the financial incentive, sublets certain work that relieves him of certain low-priced motions. Such are involved in the preventive operation of cleaning the teeth.

The third question is: "Can the dentist afford to give up this branch of his work?" There will be some objection from some quarters to this suggestion. Some will say that "the dentist needs the money." This is offset by the argument "the patient needs the teeth." Our natural teeth belong to us and we must decide."

Seriously, this new work will bring more, rather than less, work to the dentist. The barbers were aroused when they saw the rapid increase in the popularity of the safety razor. Yet the barber was

never so prosperous as he is today. Shaving was a luxury in the days of Benjamin Franklin. It is now almost a daily necessity for most men. The care of the teeth at a price that all workers can pay will eventually make more work of that type for which their training fits them for the dentist. Those dentists whom we have consulted agree to this.

The fourth question is: "Will assigning this preventive work to others than dentists spread disease?" To teach dental nurses the principles of antiseptics is a comparatively easy matter. Moreover, they should be allowed to practice only after passing a proper examination, proving their ability, and then receiving a proper license. A complete "follow-up" system, such as is outlined by Dr. E. A. Codman, of Boston, for hospitals, should be installed, whereby each treatment should be recorded, and the records sent to the state department in control of the work. This follow-up system, called the "End Result Record System," provides for making records of the patient and the treatment at the time of an operation, and requesting each patient by letter to report his condition one year after. Patients will not have the same objection to the recording of all particulars of dental treatment that they have in the case of medical treatments. Such a follow-up system "over-inspected" by the State Board of Control would very materially in-

crease the quality of the general practice of dentistry.

This paper is not on the subject of dentistry, except in so far as it discusses this separation of the function of cleaning for the prevention of decay. Nevertheless, the general principle, that inspection always causes an increase in quality, should be emphasized.

The fifth question is: "Would it not be extremely difficult if not impossible to teach the Dental Nurses the best method of doing their work?" In our work of installing management in the industries, we have found that problems that have always been considered very difficult become comparatively easy of accomplishment when the methods of the best workers have been recorded by the micromotion and Chronocyclegraph methods, then analyzed, minutely measured, synthesized and standardized. We have found that the method of least waste never lies in the consecutive acts of any one worker. We have invariably found that a better method can always be devised than has already been found in existence. This can be realized in the case of the dentists, particularly because of the fact that being "lone workers" they have comparatively little chance to watch and to learn from each other, as do the workers in an office, shop or engineering undertaking, or other groups. Recording the methods of "lone workers" always brings out the fact prominently, that

no two operators use the same method. Obviously their methods cannot all be the best. Our studies of the dentists who have co-operated with us bring out this general fact with surprising force.

Now, teaching the one best method known and presenting the method by means of standard instruction cards, stereoscopic photographs, Chronocyclegraph simultaneous motion-cycle charts, wire models and other devices and methods for the transference of the best experience and skill from those who have it, to those who have not, gives the learner at once, at the very beginning of his career, the knowledge of the best method known. This best method is based upon the actual measurement of motion study, and not upon the personal opinion or judgment of unmeasured experience. This does not mean that the worker so taught cannot deviate as his judgment later may dictate. He may deviate later for greater efficiency, and, on the other hand, he may deviate downwards, but at least, he will first be taught and will learn the best methods known, and will always feel the call and the constant interference of his habits first learned, and these are the best that can be found. This method of deriving and teaching the best way" should be used by the dental nurse, and we are prepared to furnish at cost to teachers of Cripples, standard micromotion studies of a one-armed, one-eyed, legless den-

tist, cleaning teeth with most satisfactory results.

The sixth question is: "Would not the equipment for doing the work be so expensive as to prohibit many undertaking the work?" There is much work in the prevention of decay that can be done with almost no expense for equipment. This is vital to many patients; for, in the last analysis, they pay for the equipment, whether good or bad, whether expensive or inexpensive. If quite expensive, it is not apt to be easily portable, and they must pay also with their time in going and returning to and from the place where the non-portable apparatus and equipment is located. If portable, they may have to spend more time in the cleaning process. This however, may be of still less importance if done outside of their working hours. A stick of wood—orange wood is particularly satisfactory, but many other kinds of wood are suitable—and a little powdered pumice will do remarkable preventive work in the hand of a properly taught dental nurse. If a stick be used, the same stick should never be used on two patients. The stick should be thrown away after it has once been used. The pumice, once poured into the dish, should never be used again; that is, only enough powdered pumice should be poured from the bottle to serve for one treatment of one patient. The dental nurse should always wash her hands thoroughly with good soap and hot water,

in the presence of the patient, both before and after a cleaning treatment; particular attention being given to the crevices around and under the nails. An expensive dental chair is, of course, more comfortable but it is not at all necessary. It is better to perform the process on a log in the forest, on a mason's scaffold, on the front doorstep, or in a barber's chair than not to do it at all.

This leads to the seventh question: "How can the people be induced to avail themselves of this service?" First, by making it fashionable, and by making it economically and hygienically indecent not to have teeth cleaned. Preventable loss of teeth must be made the badge of ignorance, personal neglect and indifference to national efficiency. Second, by holding parents criminally responsible for the condition of their children's teeth until the children are old enough to be responsible for caring for their own. Cavities found in children's teeth should be reported, and a follow-up system carried out, making neglect to have a cavity filled sufficient cause for a visit from a dental inspector similar to a truant officer, who would inspect and enforce the proper cleaning and thorough filling of all teeth. This may seem radical but the far-reaching ill effects of inefficient teeth are important enough to warrant it.

If statistics could be made of the loss of productive efficiency, to say nothing of the agony and loss of working

time due to defective teeth, they would show the necessity of radical treatment of this important subject. The reason that but little has been done about the nation's teeth is because the possibilities of the subject are comparatively little realized, and the most necessary innovations have always come surprisingly slowly. The majority of people as yet do not realize the actual money value of their teeth. It is safe to say that every dollar saved on teeth at present is given several times over to a physician later, and the general cause of much ill health is traceable to the bad condition or absence of the teeth. Furthermore, few people know that most of the decay is easily preventable by proper periodical cleaning, and the rest of it can be taken care of by the filling of the cavities when they are first formed. A very large proportion of the people get their first knowledge of a cavity only when it is large enough to ache.

The eighth question is: "Exactly how can this new work benefit the Crippled Soldier?" In our Motion Study investigations of the most skilled dentists who are co-operating with us, we find that the work of prevention of the loss of teeth can be done by an operator who has but one hand and no legs. Of course, it will be generally admitted that an operator will never be expected to do much of the operation with his feet. Nevertheless, most dentists stand when they are doing

such work. It can be done quite as well sitting, and legs are not in the least necessary for the work. While a dentist uses both hands with his work, the patient's hands usually remain idle. Now, we find the patient can pull his own lips to one side perfectly well, and even hold the little mirror if necessary, though this is seldom, if ever, actually essential except for greater speed and subsequent inspection. We make this statement after having had dentists actually do the work to their satisfaction with one hand held behind their backs during the entire operation.

Thus this new and necessary work may be used to provide a livelihood for the maimed heroes of all countries who are being discarded by the great war. The livelihood will be better than most of them made before they were cripples, and the vocation will provide a most pleasant outlook that will assist in hastening the rapid recovery of many a man who sees that his disability will prevent his following his previous life-work. We believe that a totally deaf, one-eyed, one-handed, legless cripple properly taught can do more efficient work in cleaning than the dentist can do in the time for which the average worker can afford to pay. This is no dream for the future. It is a working plan which is being carried out today. The most progressive and skilled dentists whom we can find have consented to co-operate with us, all without pay, and will

furnish the standardized instructions, derived by means of the methods of measurement of Motion Study. We are being advised by dentists who have had large European experience and are, consequently, thoroughly familiar with European conditions. We desire to thank them here, and especially to express our appreciation of the co-operation of Dr. J. G. Bunker and Dr. F. L. Marshall for assisting in making Motion Studies. The data derived from such studies will, by means of the Simultaneous Motion Cycle Chart, be adapted to the use

of the maimed workers, and the instruction of such workers will be immediately begun. Dental nursing will then provide a new vocation, and at the same time provide for supplying a community need. It will take no work from those who need it. Rather it will relieve an overworked profession of low-priced and low-skilled work. Moreover, being based, as it is, on Motion Study and Fatigue Study, it will supply at the same time occupation and interest—those fundamental needs of the crippled in all countries and all times.

CHILDREN'S DENTAL NEEDS

The following is an editorial appearing in the *New Bedford Standard* Mass.
The writer is well informed as to the dental needs of school children.

THE surprising degree of bad teeth conditions revealed in the young men coming under the draft will do much to make the people in general realize the disastrous results of early neglect of the teeth. Health authorities have been making in the past few years a point of the importance of care of the teeth in the interest of the general health, and the schools of the progressive cities have been impressing this upon the children and their parents, so that the outlook for some of the growing children is of a better adult state in the matter of the teeth than that of those who reached maturity with scant regard to the condition of their mouths.

But a recent survey by the United States Public Health Service of the dental condition of the children of the rural districts indicates that knowledge of the need of care of the teeth for the maintenance of good health is far too little recognized. One in five only of the children claimed credit for using a tooth brush daily. Half the children showed some defect in their teeth, while only one in six had ever had any dental care.

This is the sort of thing that furnished the foundation for the bad condition as to the teeth that have been found to exist in the men examined under the draft. The time for beginning the care of the

teeth is when the teeth begin to come—just as soon as that. A Tufts college professor has been speaking about the subtle relation of the teeth of the child to the whole well-being of the adult. The problem starts with the history of the child. Upon its early feeding and physical condition depends the condition of the first set of teeth and upon that depends in large measure the condition of the second set. No child, this speaker said, without the full number of baby teeth, kept intact throughout the natural period, can hope to have regular teeth and the early loss of a permanent tooth also works against regular teeth.

Regularity in the teeth is a matter of greater importance than is generally recognized. Upon the interlocking of the teeth at the expected points—there are approximately two hundred surfaces in a perfect contact—depends the efficiency of the teeth in their work. The vicious circle is outlined in this way—irregular teeth, improper mastication, indigestion, poor nutrition, impoverished blood, weak heart, arrested development manifested both generally and locally in irregular teeth.

Irregular teeth in the child usually concern the parent chiefly because of the blemish in the matter of looks. But they are far more than that; they are a sign of causes that should be remedied and of results that should be avoided. They call for the ounce of prevention that will achieve far more than the pound of cure. They may be the symptom of the presence of a deranged ductless gland that is preventing the proper development of the bones of the jaw. They may indicate weak heart or lungs, and poor blood. They may show poor nutrition. They may be a sign of nasal obstruction through adenoids, leading to mouth breathing and producing stress in the wrong direction of the muscles of the face and tongue. Perhaps they have come about through thumb-sucking, bottle feeding, or sucking a rubber nipple or "pacifier."

They may be indications along any of these lines. All these are warnings, if the teeth are to have a chance for right development, and do their part in building up a strong body. If the right start has not been made, then remedy should be promptly applied in the necessary dentistry and adequate subsequent care.

A SCHOOL CLINIC IN NEW JERSEY

THOMAS VINCENT, D.D.S., Orange, N. J.

LIKE other municipalities, Orange, N. J., has discovered the great lack of oral hygiene among school children, which has resulted in the establishment of a Free Dental Dispensary in May, 1916.

A modern model clinic was installed in one of the central schools, the expenses of equipment and operation being borne by S. M. Colgate, President of the Board of Education.

Clinic hours from 8:30 A. M. to 12 Noon daily, with registered operator and nurse in attendance. Complete individual, daily and monthly reports are kept on file.

The co-operation of the school authorities, medical and dental professions and their societies has been greatly appreciated. Results ac-

complished have been valuable both in relieving pain and useless suffering as well as educational. The fear of pain and the dental chair has been reduced, increased efficiency, vitality of mastication, and attendance noted; also orthodontia cases prevented, cases cured. Special attention was directed to Fresh Air Classes.

A large number of foreign-born parents were visitors and received advice.

As in all clinics, cases were presented, with both pathetic and amusing characteristics. One girl showed her emotional gratitude for an extraction by kissing the nurse; many urged others to visit us.

One little six-year-old boy brought a note, asking the removal of his deciduous centrals so he could play in his uncle's band. Upon inquiry, he said he played the violin!

MAY, 1916—JUNE, 1917.

Total patients registered.....1,537

OCTOBER, 1916—JUNE, 1917.

Total number of patients	1,404
Total number of patients (completed).....	1,333
Total number of patients (moved away).....	12
Total number of patients (not finished).....	71
Appointments kept.....	2,932

Fillings—silver	2,759
cement	624
gutta percha.....	89
Extractions	4,177
Teeth cleaned.....	1,263
Treatments	890

Total Operations.....9,802

PLANS FOR A CANTONMENT DENTAL CLINIC

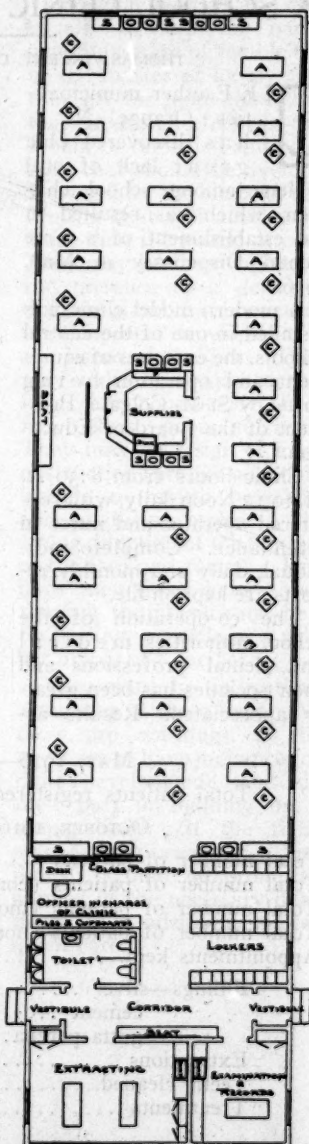
THE accompanying sketch shows the tentative plan as submitted to the War Department for a Cantonment Dental clinic. Gordon & Madden, and Wm. G. Kaelber, Rochester, N. Y., are the architects.

The building, as planned, is 134' x 30'. Provision is made for 30 operating chairs and cabinets. Wash Basins and sterilizers are situated at the end of the operating room, and in the center adjoining the space reserved for supplies. On each side of the building are two entrances opening into the general waiting room. Headquarters for the officer in charge, an extracting room with two chairs, and an examination and record room are immediately adjoining.

As there are 16 Cantonments in different parts of the U. S., each housing 40,000 soldiers, it will be necessary to have at least sixteen such buildings,—one for each cantonment.

The waiting room appears to be rather small, but in the Army it is possible to regulate the number of waiting men, as each one is under strict military orders, and the appointment with the dentist is part of the day's work.

As outlined, the plans are tentative, and undoubtedly will be modified before actual construction work is decided upon.



EDITORIAL

WM. W. BELCHER,
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ROCHESTER, N. Y.



ORAL HYGIENE

does not publish Society Announcements, Obituaries, Personals or Book Reviews. This policy is made necessary by the limited size and wide circulation of the Magazine

A DENTAL CHAOS

THE September *Dental Items of Interest* contains an editorial, "The Rotary Method of Cleaning the Teeth." The author has discovered, in fact he describes it as a somewhat unique experience, that we have no standardization of our oral prophylactic work; particularly the manner in which we should instruct our patients as to brushing their teeth.

The truth of the matter is we have no standardization, either in instrument, method or materials employed. This is a serious handicap in the oral hygiene propaganda and so long as dentists themselves are not agreed as to proper methods and materials, it only results in confusion and loss of confidence in the mind of the patient, particularly when they find "their dentist" does not agree with their best friend's dentist.

In brushing the teeth it is best to use the "rotary," the "sweeping method", or the common every day crosswise method, such-as practiced by our forefathers?

Shall we use a tooth powder, a tooth paste or just a mouth wash? And again, must the base of the powder be of chalk and that of fine texture, or, as boldly advocated by more than one dentist, shall it be a fine pumice? And the mouth wash! Must it be acid or alkaline? And, ye Gods, the tooth brush! Shall it be employed as a scrub brush or as a bunch of tooth-picks? Must the bristles be of hard, medium or soft texture? What should be its shape, size, length, breadth? Should it have a tuft of bristles on the extreme end? And, pray, how about the handle? Please tell us, must it have a hole in the end? This is very important. Should it be straight or curved? Outward or inward?

Or shall we discard the tooth brush and compromise with a "rag" wound about the index finger, or is it the little finger? Perhaps we had better employ the rubber "cot." Some dentists say this is the last word in oral prophylaxis.

Shall we abandon all these methods and confine ourselves to just plain onions? You may take this as a joke, but it is really based on "Scientific Facts." A Pittsburgh dentist asserts, onions are a much better agency to keep teeth in a

healthful state than our lotions, powders and pastes. And onions are so cheap!

Will someone please slap Reginald's wrist and put him to bed with a graham cracker? You do it; 'atta boy!

Should tooth picks be employed? They are taboo in polite society, but from observations made, it would seem they are still with us. Should the toothpick be of wood, quill, or of metal? One dentist, specializing in oral prophylaxis, supplies his patients with a pin, the business end of which he flattens in a rolling mill. In his hands it is really quite an effective instrument.

Should floss silk be employed or rubber ligatures? And how about polishing tape? Some dentists recommend, others condemn, use of such agents.

Truth to tell, we know little or nothing about these matters. Each has his individual opinion, and until a Committee or National Board of Research passes on them, things will remain in their present chaotic state.

A FEW OF THE THINGS WE CAN LEARN FROM THE CANADIANS

THE Canadian Army Dental Corps have had three years' experience in actual war conditions. The development during this period has been more rapid than in half a century of a world at peace.

The dentist was a recognized factor in the army of the United States previous to the war. We have the advantage of this organization and the Preparedness League of American Dentists.

But Canada, with her three years' experience, has many things to teach us if we are not too proud to avail ourselves of her advice and counsel.

Lieut. Col. Clayton, the senior officer of the Canadian Army Dental Corps, says that the teeth of 98 per cent. of the recruits are defective and 50 per cent. require immediate attention.

A recent report of the Military Committee of the Rhode Island Dental Society showed that 407 men examined had 2,687 teeth needing immediate attention. Four hundred and seven teeth or roots required extracting and only sixteen of the whole number had mouths in good condition. Ninety-six per cent. needed dental attention. This is in accordance with the statements of Lieut. Col. Clayton.

You cannot hope to get the full significance of this in the minds of the layman or the army authorities. That the Rhode Island dentists were astounded at the conditions found, is indicated:

"This examination proved to your committee the deplorable condition of the mouths of the men, and they considered it would compare favorably with the conditions as existing throughout the entire United States. If this were the case, it would be a physical impossibility to correct this misfortune even if every one of the dentists of the country were to try their best."

Undoubtedly, it was a full recognition of this condition that prompted Col. Clayton to state that the Canadian Army Dental Corps started out with the idea that one dentist to one thousand men would be ample to meet the dental needs and soon found that one to five hundred was not enough and hoped to have three dentists to each one thousand in the future.

The Dental History Sheet, as employed by the Canadian Army Dental Corps, is most important and we should speedily adopt such a method.

At the end of the war we want to know the condition of the mouth of every soldier on entering and leaving the army. With the employment of a dental history sheet, this will be possible.

In Canada they have found that the returned soldier requires much dental attention. If, when mustered out, teeth have been lost during service, they are entitled to receive bridge work or any other operation that will restore their mouth to usefulness.

During our Civil War, we had no Army Dental Corps. No examination or record was kept of the mouth or teeth. Thousands of claims for pensions have been allowed for loss of teeth during army service and undoubtedly many of these were fraudulent. A physical examination that does not include a dental record chart is certainly very incomplete and leaves the door wide open for fraudulent pension claims for the next fifty years.

This one thing, if properly done, would save many times the entire cost of the Army Dental Corps. It is to be hoped this matter will receive early attention.

OUTLINE OF ORAL HYGIENE LESSONS

THE importance of the series of thirteen oral hygiene lessons, one each month, now appearing in the magazine, are not understood by most of our readers. Thus far, three lessons intended for use in the primary grades have been published, viz: No. 1, Lillies of the Mouth; No. 2, Specked Apples; No. 3, When Teeth Sleep. The first of the series intended for second grade pupils, appears in this issue. There are three lessons in the series, viz: No. 4, A Don't Tell Party; No. 5, Silks and Smiles; No. 6, What the Chu-chu Engine Teaches. Four lessons intended for the grammar grades will follow, viz: No. 7, Dental Danger Signals; No. 8, The Dental Train; No. 9, Black Sheep of the Dental Flock; No. 10, Dental Enemies. Three lessons intended for the high school pupils will complete the series, viz: No. 11, A Trip Through the Mouth; No. 12, The Dent in Dentistry, No. 13, Teeth and Tombstones.

You are urged to call the attention of your school authorities to these lessons and if necessary, copy them on the typewriter, so that every teacher has an opportunity to use in her school work.

EMERGENCY CASE RECORDS

NO doubt most of our readers asked if they kept a record of their work, would reply most emphatically in the affirmative.

Would it shock you to know that the great majority of dentists are so lax in this matter, that they are open to suit for malpractice; a constant invitation to the unscrupulous patient and briefless lawyer? Many dentists are in the habit of waiting on patients, particularly emergency cases of extracting, without even ascertaining their name and address.

Why bother with such detail? They pay cash; the transaction is complete. But is it?

Suppose some day you receive a telephone call from an unknown lawyer who states that his client, Mrs. Mary Smith 12 Stone St., City, is suffering from a "broken jaw," or perhaps a serious infection due to careless use of unsterilized instruments. Again, it may be an unextracted root. This service was rendered some six weeks previous and you have no record or recollection of ever having operated for such a person. He demands an early settlement; a mere bagatelle of five thousand dollars will adjust the matter.

What are you going to do? You have no X-Ray record and you do not know for sure that your instruments were sterilized. Of course, you have to depend on the "girl" for this service and sometimes she is careless. You have been com-

pelled to speak to her several times about the matter of late.

Well, it is too bad. But the condition in which you find yourself is not unusual. It is that of 95 per cent. of the dental profession today. This was all well enough in the old cotton slinging, velvet carpet operating room days of Henry Ford's first automobile, but it does not fit in with the 1917 model. You certainly are in no position to defend a suit in court. Perhaps you carry liability insurance. This may help some but it cannot take the place of an individual record card and the Court will be impressed with the fact that your business is conducted in a very slovenly manner. It is your word against the patient's and she has a dozen neighbors, an unpaid physician's bill, bolstered up by his testimony as to her sufferings.

Suppose it is your custom to make out a record card for every patient that comes to your office for professional services. Your record for extracting would read somewhat as follows:

RECORD OF EXTRACTION.

Name	<u>Mrs. Mary Brown</u>	
Address	<u>12 Stone St. City</u>	
Reference	<u>Sam. Sloan</u>	<u>Tel. 4125 Park</u>
Date	<u>Feb. 3rd 1917</u>	
Operation	<u>Ext. U.R. 3 Mo. - L.L. 1 Mo.</u>	
X Ray	<u>Refused</u>	
Sterilized	<u>Iodine</u>	<u>Instrument Off. Nip Barnes</u>
Anaesthetic	<u>Cocaine 1% hyp. injection</u>	
Treatments	<u>2/4/17</u>	<u>2/7/17</u>
Remarks	<u>Current socket + iodine + Minst wash 2/4/17</u>	
	<u>Treat socket + iodine 2/7/17</u>	
	<u>Cash \$2 - \$1 - \$1 - \$4⁰⁰</u>	

With such a record you are thrice armed. The Court does not expect anything above average ability. It is not unreasonable in its demand of antiseptic precautions. Even skilful surgeons have lost patients, and infection with every precaution exercised is not unknown.

To install such a system is no great work and should you be so fortunate as to never need its protection, it will amply repay for itself to feel that you are in a position to defend your good name and standing as a dentist.

NOTE AND COMMENT

*"The old worry cow
Might have lived till now
If she had not lost her breath;
But she thought that her hay
Would not last all day,
So she worried herself to death."*

It is indeed good news to learn, that after twenty years' constant effort, Congress passed and the President signed the bill, placing the dental profession on the same basis as the medical, so far as the Army Dental Corps and the exemption of students from the draft law is concerned.

DR. W. A. WHITE, Phelps, N. Y., lecturer on Oral Hygiene, and a member of the New York State Board of Dental Examiners, died October 14, 1917.

AN anonymous donor has made it possible to equip a new dental clinic at Framingham, Mass. A dentist from the Forsyth Infirmary has been obtained and it is expected to soon be in active operation.

THE output of platinum in the Ural Mountains, Russia, amounts to 86,500 troy ounces for 1916. This is about three-fourths of the output of the previous year. Shortage of labor, difficulty in obtaining spare parts for machinery and the exhaustion of the richer alluvial deposits, are given as the chief cause.

IN consequence of the shortage of sugar and glycerine (largely used for the manufacture of explosives), the English General Medical Council has withdrawn from the Pharmacopoeia all drugs containing sugar and glycerine in their preparation. The list is a long one and it is expected that these preparations will be modified or others substituted in their place.

THE Association of Military Dental Surgeons of the United States, John D. Millikin, Pres., with headquarters in San Francisco, publishes a quarterly bulletin, containing military dental news of interest to both the Army and Navy Corps.

"DR." NICHOLAS CLEMENTS is under indictment in New York City for manufacturing and marketing imitation neosalvarsan and operating a fake medical and dental diploma factory. The imitation neosalvarsan was made up of a little common salt colored yellow. One lot alone, now in the possession of the Department of Health, was purchased by a wholesale export house at \$1,800.

DR. ALFRED FONES, of Bridgeport, Conn., has been appointed chairman of the Oral Hygiene Committee of the Dental Section of the Council of National Defense. He will instruct and train 1,000 Red Cross nurses, who will then be sent to the sixteen different training camps in the country to do preliminary work toward putting the teeth of the soldiers in good condition. They will clean the teeth and make a report for the guidance of the dentists.—*Journal Allied Dental Societies.*

DR. S. M. WEAVER, Cleveland, O., has recently been appointed by Major Logan as a member of the Motor Dental Car Committee of the Council of National Defense. The Government desires fifty motor dental ambulances with a standard equipment. All of these matters are in charge of the Motor Dental Car Committee of the Council of National Defense, of which Dr. Harvey J. Burkhart is chairman.

DURING the month of August, the mouths of 180 children were taken care of at the Milwaukee Children's Hospital, Milwaukee, Wis., The whole amount of dental services rendered for the current year up to date is said to approximate \$2,700.00 in value.

THE Harvard Dental Chair has been selected for the Navy base hospitals and dental dispensaries located in battleships. The Ritter Chair is for use in the Army base hospitals and dental dispensaries. The Pressed Steel Antiseptic Cabinet of Lee Smith, Son & Co. is exclusively used in both Army and Navy.

DENTAL cement can be removed from bone or agate spatulas if placed, while plastic, in a solution of water and sodium bicarbonate; about one-fourth teaspoonful to a glass of water is sufficient. Spatulas should be thoroughly rinsed in clear water and wiped with alcohol.

THE New York State Health Department maintains a film library. Stereopticon slides, motion picture and stereopticon apparatus are loaned to any responsible resident of the State desiring to give a lecture at any public gathering. The film, Oral Health, the production of the New York State Dental Society is one of these. The stereopticon slides include a set devoted to Oral Hygiene. Dentists residing in New York State are advised to address the Commissioner, Herman M. Biggs, Albany, N. Y.

"THE Teeth as a Factor in General Health," is the title of a little talk on health and hygiene by Samuel G. Dixon, M.D., the Health Commissioner of Pennsylvania. This was sent out to the public press, and undoubtedly will be of material assistance in spreading the gospel of oral hygiene to the residents of that State.

COLUMBIA UNIVERSITY, New York City, is out with an announcement of advanced courses in dentistry. Admission to the same is limited to reputable practitioners of dentistry who have been graduated from a registered school. A number of courses are open, varying from one week to twelve. The fees range from \$60.00 to \$180.00.

THE first session of the Columbia University, School of Dentistry is announced. The first students having been admitted to the course in the College of Physicians in September, 1916, the Trustees of Columbia University, on March 5, 1917, established a School of Dentistry as of September 27, 1916, so that the conduct of the course from that date, as forming part of the work of the school, might be officially recognized. Two years of study in an approved college, or scientific school is demanded for entrance. The course is five years, the first two of which are in the medical department of the University, the last three in the dental department. The fee varies from \$200 to \$300 per annum for instruction.

WITH the automobile factories running to full capacity, one of which expects to build half a million machines this year, there will be no need of commandeering private automobiles and thus no opportunity to sell your second-hand automobile to the Government. The Ford Motor Co. has voted to give \$500,000 worth of ambulances—about 1,000—to the Red Cross.

THE announcement is made of the gift of \$1,650,000 to the University of Minnesota by Drs. W. J. and Chas. M. Mayo of Rochester, Minn. This is truly a noble gift and represents the accumulated savings of these talented physicians in the practice of their profession. It is their wish that the fund should serve the State for generations in the furtherance of medical investigation and research. The Regents of the University accepted the gift in the spirit in which it was tendered and it will serve to perpetuate their fame and help to relieve the sufferings of generations unborn.

ONE of the perquisites of the janitor in the medical college of Austria is that the bones of the cadavers become his property after dissection. These are carefully prepared, degreased, bleached and sent abroad for sale, particularly to the United States. Due to the fact of Austria entering the war, such shipments have ceased. Supplies in the hands of American dealers have become exhausted and it is practically impossible to secure skulls or skeletons at any price.

A LEARNED M. D., he from New York City, where knowledge is supposed to emanate, says in August *American Medicine*: "As a matter of fact, carious teeth in children under five years of age are a rarity." This gentleman, if he exercised only common intelligence and observed the decayed teeth of children in the anterior portion of the mouth, could not help but be convinced of his error.

THE Golden Plover flies all the way from its breeding grounds in Alaska to Hawaii, a distance of 2,000 miles, without alighting or pausing for rest. It is said to travel at a speed estimated at fifty miles an hour and about forty hours of constant flight must be required to accomplish the trip. This bird, considered as a piece of mechanism, is far superior to the best flying machine yet made. Less than two ounces of fuel in the form of body fat suffices to carry the Plover at high speed over this two thousand mile course. A flying machine to be equally economical, should be able to fly twenty miles with a single pint of gasoline instead of the gallon now used by the latest models.

ONE of the happy discoveries is the so-called alcohol soap which is proving so useful in the trenches. It combines both the action of alcohol and soap in cleansing and it lights when touched with a match. It is prepared by adding 150 gm. of dry and finely scraped castile soap to 500 cc. alcohol. To this 12 gm. of shellac is added, shaking well and heating in a water bath, after which it is poured into molds to harden.

WM. MARCONI in an article in the September issue of the *Wireless Age* says, "It has required a readjustment of view point for me to appreciate the fact that so much of the scientific development of the wireless art has been kept secret for military reasons. No longer are wire telephones and telegraphs used in the trenches bordering 'No-Man's Land.' We find it impossible to maintain these lines with the constant shelling with high explosives."

THE soaring flights of war brides and war babies were not more remarkable than the recent upward swing in the price of silver. At the beginning of the war, bar silver sold in New York at 52½ cents per ounce. Mexican dollars were worth 40 cents. September 15th the quotation in New York was 100½ cents per ounce. Silver has more than doubled in price in the past two years and the present quotation is the highest since 1890. One of the reasons of this spectacular rise is the hoarding of gold, stimulating the demand for the white metal to a point far beyond ordinary proportions. This has been further intensified by curtailment of production in various producing centers, particularly Mexico. It is expected that it will continue to advance and may reach its valuation of 1857, when it was quoted at \$1.35 per fine ounce.

THE War has kicked King Alcohol downstairs in practically all the countries engaged in warfare. The United States has not been behind hand in this particular. Saloons are not allowed in the vicinity of military camps and the manufacture of whisky has been prohibited by an Act of Congress. My Lady Nicotine, meanwhile, has been elevated as liquor has been lowered. In some States the sale of cigarettes has been prohibited but the demand for "the makings" in the trenches is so great and incessant that even Young Men's Christian Associations co-operate in furnishing supplies to them. The soldier at the front regards his tobacco as not less necessary than his food. The sedative effect is said to be requisite to the best work there. One might as well argue for depriving the soldier of air and his bayonet as of depriving him of his tobacco.

THE following from the *Pike County Republican* goes to prove that, "The world do move!"

Twenty years ago:

Ladies wore bustles—Operations were rare—Nobody swatted the fly—Nobody had seen a silo—Nobody had appendicitis—Nobody wore white shoes—Nobody sprayed orchards—Cream was 5 cents a pint—Most young men had "livery bills"—Cantaloupes were muskmellons—You never heard of a "Tin Lizzie"—Doctors wanted to see your tongue—Milk shake was a favorite drink—Advertisers did not tell the truth—Nobody cared for the price of gasoline—Farmers came to town for their mail—The hired girl drew one-fifty a week—The butcher "threw in" a chunk of liver—Folks said pneumatic tires were a joke—Nobody "listened in" on a telephone—There were no sane Fourths, nor electric meters—Strawstacks were burned instead of baled—Publishing a country newspaper was not a business—People thought English sparrows were "birds"—Jules Verne was the only convert to the submarine—You stuck tubes in your ears to hear a phonograph and it cost a dime.

THE following from *The Dental Surgeon, Eng.*, would go to prove that the English Army is handicapped by red tape:

"Forms, forms, a baffling mass of printed forms, for which I can see no explanation and no excuse. It may sound incredible, but there are over twenty forms to fill up over a bit of a job like the extraction of two teeth."

"A soldier's commanding officer has to fill up three army forms before the man can have two teeth extracted at the expense of the community. Yes, and in connection with the same two teeth—and two shillings—I am compelled to put my signature on no less than six forms—three per head, or per tooth, rather."

"Six forms would appear to be trouble enough, but there is another gentleman who must wade through a still deeper mire of yellow paper, and that is the man's medical officer."

"That poor, unlucky and oversigned individual is compelled to put his signature on a dozen of these ugly prison-printed pieces of paper, and I daresay he gets through it, volubly, and with very violent hands."

"The A. D. M. S. has to join in the yellow paper procession, too, and affix his signature to three of these precious documents, but I cannot picture his doing it proudly."

"One tooth? No papers at all for one tooth. A soldier so ill-advised as to have an ache in only one tooth must pay for its extraction out of his own pocket or suffer on. A tooth that has no more sense than to go and ache all by itself is altogether beyond the bounds of reason, regulations and Red Tape."

It is reported that approximately 20% of the bed capacity of the Base Hospitals in the war zone is occupied by cases classified as surgery of the head. In view of the number of these and their importance as shown by the experience of our Allies, the Surgeon-General of our Army is making special preparations to take care of these cases according to the best and most recent methods. It has been found that patients do best if given advantage of an early operation and prolonged rest. In order to meet this need, it is planned to have a hospital established in France which will be devoted entirely to head injuries. It is to have a capacity of at least 1,000 beds and in reality it is to be an adjunct to the various base hospitals. A specially trained personnel and adequate equipment, including Roentgen-ray apparatus, and a mechanical division for reconstructing appliances, will be a feature. Specialists in the treatment of eye, ear, nose, throat, brain, mouth and teeth will be employed. The establishment of such a hospital means not only the saving of lives, but also better care of these most dangerous and disfiguring of all wounds of war.

THE following is an abstract of an article entitled "The Dental Profession and the War," which appears in the August issue of the *Dental Record*.

"Let us briefly look at the dental organizations of the various armies of the Allies. The Canadians have a very efficient Army Dental Corps comprising a personnel of 2,000, with a colonel as director-general. These include dental surgeons, mechanics, and orderlies. A reasonable number when the small size comparatively, of the Canadian contingent is considered. The Australians have a similar arrangement. The French have over 1,000 qualified men, apart from many attached to hospitals. The Americans, with their usual thoroughness and respect for that which will effect economy and increase efficiency, are tackling the problem in an effective manner. The Dental Corps is to form part of the Medical Corps. The present establishment is one dental surgeon per 1,000 men, and it is even proposed to increase this to one per 500 men. Dental surgeons are to be on an entire equality with their medical colleagues and will receive equal rank and status. There is no suggestion that qualified men should be used as combatants. The American does not waste specialized skill like that.

"To turn to our own army. We have less than 500 army dental surgeons to look after an army that runs into millions of men. There are 600 or 700 serving as combatants, many as privates.

"The loss of effectives, because of lack of proper dental treatment, must run into many thousands. I have been told by R. A. M. C. officers that the recovery from sickness and wounds is in many cases markedly delayed by the presence of oral sepsis, which they are unable to get removed owing to the lack of skilled assistance. I have heard of many instances of rest camps full of men sent down from the line unfit, solely on account of the condition of their mouths. This sort of thing spells waste of manpower. One comes across innumerable instances of great suffering borne by men on active service simply because there are not sufficient army dental surgeons to attend to them. Surely simply humanity would prompt the provision of means of relieving the unnecessary suffering of these men, who have quite enough discomfort apart from dental and allied troubles.

"In fact, if a man happens to be a home service man or in a labour battalion, he is debarred by the regulations from receiving dental treatment. Can anything more grotesque or absurd be imagined? Such a state of affairs is a slur on a civilized nation, and every effort must be made to remedy it. To effect this, combined action between the medical and dental professions must be taken. Pressure must be brought to bear on the R. A. M. C. authorities very greatly to increase the army dental establishment, to place dental men on the staff, and to stop recruiting dental surgeons as combatants."

FOUR hundred miles of a total of four hundred forty-six miles of the New York barge canal are now completed. It has a minimum depth of twelve feet. The total cost will be \$150,000,000, of which the machinery used in its construction cost ten million. It has a width varying from ninety-four to two hundred feet. The number of locks is given as fifty-seven. The lift of each of these varies from six feet to forty and a half. The latter is situated at Little Falls. Three hundred railroad and highway bridges span its right-of-way and many novel engineering problems have been solved in its construction.

THE seventh biennial report of the Illinois General Hospital for the Insane at Peoria says, "In no departure has greater good been done our patients than in the creation of the position of dentist. To think that these inmates had been allowed to exist from one to forty years without the services of a dentist other than the occasional extraction of a tooth by an assistant physician, seems incredible."

HAVE you noticed, asks the *London Mail*, how many girls are now wearing gold stopping among their front teeth? A dentist tells me the fashion came in with the Australian and Canadian soldiers, who won the hearts of flappers wholesale on their appearance in London. Colonials are strong believers in this form of frontal dental decoration. But their female imitators have gone to extremes. My dentist friend says that girl clerks and munition workers will have gold stopping and gold crowning at any expense and on any pretext. They even, the dentist says, go so far as to wear spaces between their teeth, by means of needles, in order to make room for the gold that glitters. Which recalls the description of the mouth of Jack Johnson, the black ex-champion heavy-weight, as being "like a starry night."—*Dental Surgeon*.

SEVENTY-ONE per cent of the wheat kernel is utilized in the making of white flour. As a war measure it is urged that a larger share of the kernel should now be utilized for human food by requiring the miller to produce a whole wheat flour.

This proposition seems sound at first thought, but carefully analyzed in the light of all facts, it is of questionable value. If the residual parts of wheat, known as middlings, shorts, and bran, were waste products, there might be little question about the desirability of saving by grinding them with what now goes into the flour. But, these bran products are not wasted—far from it. They form a considerable share of the cattle and poultry feed of the country. They are transformed into meat and eggs, and it would mean the substitution of other feeds such as high-price corn, and a consequent increase in the cost of producing beef, dressed poultry, and eggs, should a larger percentage of the wheat kernel be employed.

Another important consideration is the fact that flour containing a large percentage of the wheat kernel does not keep as well. This would produce a serious hindrance in storing, shipping, and retailing.

THE most modern hospital train to be found in this country or abroad has been presented to the State of Maryland by three Railroads—the Baltimore and Ohio, the Pennsylvania and the Western Maryland. Six cars make up the train, three of which are devoted for hospital purposes with forty-two hospital beds. An operating car not to be surpassed in its equipment; a pullman and dining car for the personnel of the hospital, and an express car which carries two motor ambulances, make up the balance of the train. By means of an overhead trolley, a stretcher may be carried from one car to another.

THE following is taken from "Girard's Topics of the Town," *Philadelphia Public Ledger*:

"Your great grandfather carried the market basket on his arm and your great-grandmother never saw a delivery wagon from any store. There was none.

"Today, one Philadelphia merchant will pay over \$10,000 to carry home his customers' packages.

"It costs us not more than one cent to bring an orange more than 3,000 miles from California, but your fruit dealer, two blocks away, will charge you double that commission to bring it to your house.

"Three busy tax-gatherers who dip into your pocket every day are, 'Have it charged,' 'Have it exchanged,' 'Have it delivered.'

"Merchants cannot work for pleasure alone, and when you insist—when 2,000,000 other people in and about Philadelphia insist—that you shall have your commodities 'charged,' 'exchanged' and 'delivered,' it is good-night, economy.

"Pay cash. Keep what you buy and carry your package home, and the price of every commodity will fall."

THE following appears in *Around the Table*, September *Dental Items of Interest*:

"Dear Bill: When is your mouth not your mouth? When it belongs to the periodontist. And that is no joke I'll swear. Of course your mouth never does actually belong to the periodontist. He only treats it as though it belonged to him. And not exactly that either, because be sure if it were his own mouth he would be more lenient with it; less conscientious you know.

"How did I get into the hands of a periodontist? My own fault, I suppose. Neglected my teeth, till my regular old family dentist told me he could do nothing for me until after I had seen a periodontist. At the time I thought he was just giving me advice. Now I know it was a sort of threat; and that what I went through with was punishment for my sins; sins of omission and commission you know; especially the former.

"What is a periodontist? Of course you would ask that! Well, a periodontist is a new-fangled sort of dentist who stands ready to do a job for you that your own dentist will not do, because he, your own dentist, knows that if he did, you would never go back to him. The one they condemned me to visit, looked me over gravely (I thought of the grave later) and said my teeth were pretty good but that my gums needed treatment. He opened a handsome little case containing two hundred or more little hoes, and at once began some gardening under my gums.

"I don't know whether it is part of the game to draw blood, but that man drew blood from me as neatly as Rebecca of old drew water from a well. Oh well! It is surgery, I suppose, and what would surgery be without a little blood letting? Answer: it would not be surgery.

"When he paused in his agricultural, I mean surgical hoeing, I ventured to remark: 'Your's is a terrible way of making a living!' To this he made no reply whatever.

"Later I had another chance to speak, and I said: 'Doctor, I know now why you have O-DONT on your door.' Ha! Ha! But my laughter was lonesome. The Doctor did not join in. Taking up another shovel he went at it again. All the way round outside; all the way round inside; upper teeth; lower teeth; and so on—and on—and on! And no ether either.

"The last thing he did was to touch every raw place with iodine and liquid fire, that sent me out of the office in a cold sweat. And the funny foolish part of it all was that I went back in two days and let him do it all over again.

"Bill, old scout, stick to your family dentist. Visit him often. Between times clean your own teeth! Clean them, Bill, clean them! Thus you will avoid this new enemy of mankind. Fraternally yours, Jack."

THERE is said to be at the present time over 2,000 American physicians serving on the battle front in Europe. Conditions are such in the European countries at war that no more physicians can be used to take consignments in the Army Medical Corps without seriously endangering the supply of medical men for the treatment of the civil community. This is true not only of England and France but also many of the English colonies, particularly New Zealand. As an example, in one portion of New Zealand it is reported that there is only one physician to cover three hundred miles of country.

DENTISTS extracted many teeth for men called to the colors during the Civil War and thus prevented their being drafted. One would hardly expect a dentist in this age to be guilty of a like practice but the following item from a Rochester, N. Y., daily publication would go to show that such is not the case.

The jolt he received taught him that in time of war it is well for a dentist to know something about his male patients and whether by extracting their teeth he will place his own liberty in jeopardy.

"A man was called for physical examination by one of the local boards. He was a fine specimen of humanity and would have been accepted but for one factor. When he opened his mouth for examination there was not a tooth in his upper jaw. In answer to questions he said that his teeth were not very good and that a dentist had taken them all out and was going to make a plate for him.

"Were they all decayed?" the examining physician asked.

"All but three," was the answer, "an eye-tooth and two behind it. They were good, and the first dentist I went to said that he would not take them out. So I hunted up another and he took them all out."

By his own admission the man would have had four molars, two upper and two lower, and that would have made him acceptable for the draft. The local board members conferred and called in Thomas E. Moran, deputy United States marshal. The man gave the name of the dentist who had done the extracting and the deputy marshal called on him, taking the man along. The dentist finally admitted that he recalled having drawn the teeth.

"It is a very serious matter," Deputy Marshal Moran said, "to extract the teeth of a man within the draft age, and —"

"I don't know anything about the draft age," the dentist answered, "and I can't be expected to know how old or how young my patients are."

"The limits of the draft age are set forth in the law," Mr. Moran said, "and because you do not know them does not excuse you in the eyes of the United States government. It is your duty to know. You ought also to know that when you drew this man's teeth you were aiding and abetting in an evasion of the selective draft law and are liable to arrest and punishment."

When the seriousness of his offense had been pointed out the dentist became penitent and said that it had not occurred to him that he was doing anything out of the ordinary. Deputy Marshal Moran and the members of the local board who had accompanied him were of the opinion that he was speaking the truth. For that reason, after administering a warning that a repetition of the offense would not be overlooked, the matter was dropped and the man was exempted.

"The dentists of Rochester and everywhere else should know and bear in mind that at present they have certain responsibilities which they cannot evade," said a local board member. "They ought to acquaint themselves with the provisions of the selective draft law and be careful to obey every section of it that applies to them and their work. I would recommend that in every doubtful case they call in the physician member of the local board for the division in which the patient resides. The name of the physician can be easily learned by telephonic inquiry at local board headquarters in the City hall."



Heard it afore

FUNNIES

We want good, clean humor for this page and are willing to pay for it. Send me the story that appeals to you as "funny" and if I can use it, you will receive a check on publication—address EDITOR, 186 Alexander Street, Rochester, N. Y.



That's a goodun

A SLACKER, in order to avoid the army draft, had all his teeth taken out. When called before the exemption board the doctor examined the young man, and declared him exempt—on account of having flat feet.—*A. L., New York.*

"Josh," said Aunt Maria, "do you know that next Sunday will be the twenty-fifth anniversary of our wedding?"

"You don't say so, Maria!" responded Uncle Josh, pulling vigorously on his corn cob pipe. "What about it?"

"Nothing," answered Aunt Maria, "only I thought maybe we ought to kill them two Rhode Island Red chickens."

"But Maria," demanded Uncle Josh, "how can you blame them two Rhode Island Reds for what happened twenty-five years ago?" —*C. E. C., Jackson, Mich.*

"It's funny how afraid your horses are of automobiles up here," said a summer visitor to a Maine farmer.

"I don't know that it is so funny," answered the farmer. "Not so strange, when you think how an automobile must look to a horse. Wouldn't it seem strange to you if you saw my pants comin' down the road with nothin' in em?"—*J. A. C., Hoboken, N. J.*

First Urchin (before the battered statue of Victory)—"Who's dis statue widout a head!"

Second Urchin—"Dat's 'Victory.'"

First—"Gee! I'd hate t'see the odder guy."

MRS. BROWN entered the nursery one day to find her promising young son down on the floor, flopping and kicking around, then jumping up in the air and coming down on the floor again.

"My heavens!" she exclaimed.

"Sh-h, mother," he warned her, "don't speak to me. I'm a rooster with its head cut off."—*J. A. C., Hoboken, N. J.*

"WHERE'S your toothbrush, Johnnie?" asked the teacher at the toothbrush drill.

"Ma took it to clean the celery."

AN Irish captain, "somewhere in France," was addressing his command just before they were to go over the top.

He stood up in front of them and shouted, "We are now about to charge the inimy. Till me will yez fight or will yez run?"

And the men as with one voice shouted back, "We will!"

"Yez will what?" asked the captain.

"We will so!" came the answer.

"Foine," replied the captain.

"I knew yez would."

ONE Rookie to another at one of the new cantonments:

"Where do you bathe?"

"In the spring."

"I didn't ask you when, I asked you where!"

VILLAGE store keeper (as pastor executes a masterly retreat from his store): "Dam ole hypocrite, this is the same lead quarter I put in the collection last Sunday."